

## ABSTRACT OF THE DISCLOSURE

The present invention relates generally to cyclooxygenase enzymes (COX) and more particularly the COX-2 enzyme. The present invention provides compositions, methods and articles of manufacture (kits) for determining the COX-2 activity in a sample of a subject, such as a patient or a cell culture. The present invention is useful in monitoring inflammation and cancer, or other disease processes, in patients in a clinical setting.